

REMARKS

Applicant certainly appreciates the indication of allowance of claims 3 and 7 if amended to become independent, incorporating the requirements of the parent claims and any intervening claims. Applicant has accordingly amended claim 7 and canceled its parent claim 5. Applicant submits that the remaining claims as amended are patentable. Applicant is also enclosing a copy of Figure 1 with a correction to the lead line for seal 18, as set forth in the specification on page 6, line 6. Applicant is also enclosing a Replacement Sheet with the lead line correctly drawn.

Applicant has amended claims 9 and 10 to overcome the rejections under 35 USC §112. Applicant respectfully traverses the rejection of the claims over Zehren in view of Huntsinger, and Zehren in view of Hopper and Van Valer. In Zehren, referring to Figures 2-4, a body member 136 lands on an orientation sleeve 137. A running tool then pulls up rod 164, which pulls up carrier 156 relative to body 136. This causes slips 168 to slide upward and outward on ramps 138 and wedge against the sidewall of tubular member 96. Electrical contacts 194 on slips 168 press against dome-shaped electrical contact heads 110. Wedging action holds the assembly in the position of Figure 2. To retrieve, the retrieval tool will pull upward on enlarged tip 154, which releases the wedging engagement of slips 168, allowing them to slide back down to the retracted position shown by the phantom lines in Figure 2.

Claim 1 as amended requires an outer electrical connector member having an inner end mounted in a passage formed in the sidewall. Referring to Figure 3, the inner end of connector 75 is substantially flush with the sidewall of bore 29. Claim 1 requires that the inner member while in an extended position be within the passage in electrical engagement with the inner end of the outer member. Figure 3 shows inner member 43 in a retracted position, inner member 43 including a pin contact. In the Figure 4 version, inner member 143 has a sleeve-type electrical

contact. Figure 5 shows the inner member of Figure 4 in the extended position, with sleeve 143 extending into the passage in tree 13.

Zehren does not suggest extending the inner member into a passage in the outer wellhead member. The outer member electrical contacts are dome-shaped and located in the bore of member 96, not within the passage containing outer insulator 108. Furthermore, applicant submits that it would not be obvious to one of average skill in the art to cause the inner member to protrude into the passage containing the outer electrical member. The reason is due to the type of movement of the slips, which is partly axial and partly radial. If contact 194 extended into the passage containing insulating sleeve 108, straight outward radial movement would be required to insert and withdraw contact 194. However, slips 168 do not move in pure radial motion. Rather they slide along a taper, thus move axially as well as radially. It would not be possible without extensive redesign to cause inner contact member 194 to locate within the passage containing insulating sleeve 108 while in the extended position.

Huntsinger shows an electrical connector that operates in reverse from what is claimed. In Huntsinger, the outer member moves between a retracted position, shown in Figure 3, and an extended position, shown in Figure 2. The inner member is stationary. Huntsinger does not suggest how one could reverse this approach as claimed in claim 1. Huntsinger discloses using a threaded sleeve 100 that when rotated by arm 103 will advance the outer connector to the extended position. There would be no access to such a sleeve if the movable contact were located on the inner wellhead member within the wellhead 43.

Hopper discloses a hydraulically actuated electrical connector. Again, it is the outer connector member that strokes, not the inner connector member. There is no suggestion of how

one could reverse such an arrangement in view of the small diameter and through bore of the inner wellhead member.

Van Valer deals with a refrigerated truck that is plugged into a stationary power source while the vehicle is stopped. In Van Valer, the purpose of the device is to avoid the operator from inadvertently driving off without remembering to unplug electrical connector 26. Applicant submits that this patent has no relevance to the field of remotely actuated electrical contacts between inner and outer wellhead members.

Claim 4 depends from claim 1, specifying that the outer member moves in straight radial movement from the retracted to the extended position. In Zehren, inner member 168 moves in both axial and radial movement, not in straight radial movement. The inner members of Huntsinger and Hopper are stationary, and do not move at all. The outer members do move radially, but there is no suggestion of how the actuating mechanisms could be incorporated within an inner wellhead member.

Claim 8 requires that the outer member have an inner end located in a passage within an outer wellhead member. The claim requires extending the inner member of the electrical contact outward into the passage in electrical engagement with the outer member. As discussed above, Zehren does not disclose extending the inner member of electrical contact 194 into insulating sleeve 108. Dome heads 110 prevent such insertion. Furthermore, because slips 168 move both radially and axially, even if dome heads 110 comprised receptacles in insulating sleeves 108, the electrical contacts on slips 168 would not be able to insert into insulating sleeves 108.

Claim 9 requires operating a running tool to set a locking member between the inner wellhead member and the outer wellhead member. In Figure 1, the locking member is shown as

sleeve 17 and radially expandable member 23. The claim requires simultaneously with step (d), performing step (e) by engaging the running tool with the actuator and moving the actuator downward with the running tool. Figure 3 shows the actuator by the numeral 35.

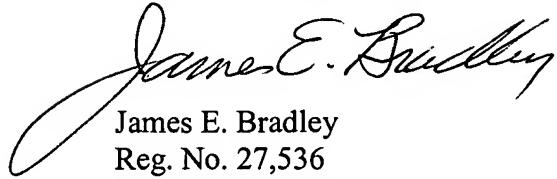
In Zehren, there is no mention of locking suspension head 34 in the wellhead with a lock member. Moreover, in Zehren, actuators 168 and 154 move the slips 168 outward in response to upward movement, not downward movement as required in claim 9. Applicant submits that it would not be obvious to one of average skill in the art to change the arrangement in Zehren to that claimed by application.

Claim 10 depends from claim 9 and requires an axially movable setting member, which is piston 16 in the example shown in Figure 1. It requires the inner member move outward in response to downward movement of the setting member. This is the reverse of what is shown in Zehren.

Claim 11 depends from claim 8, specifying that the movement of the inner member be along a straight radial line. As mentioned, Zehren moves the inner members 168, 190 both radially and axially.

It is respectfully submitted that the claims are now in condition for allowance and favorable action is respectfully requested.

Respectfully submitted,



James E. Bradley
Reg. No. 27,536
Attorney for Applicant

Date: March 14, 2025

BRACEWELL & PATTERSON, L.L.P.
P. O. Box 61389
Houston, Texas 77208 1389
Tel.: (713) 221-3301
Fax: (713) 222-3287

Fig. 1

